



#### THE DEVELOPMENT OF ROTOMOLDING PROCESS





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Rotational molding, also known as rotational molding, is to put a quantitative powder resin into a cold mold, and the rotomolding machine drives the mold to revolve and rotate slowly around two mutually perpendicular axes, while heating with an external heating source. Mold, so that the resin powder is melted and uniformly coated on the entire surface of the inner cavity of the mold by its own gravity, and finally a hollow product is obtained after cooling and demoulding.



In the plastic process, there is a molding method, that is, rotational molding. Rotational molding, also known as rotational molding, rotational molding, rotaty molding, etc., is a plastic hollow molding method.

Rotational molding, at first it was only used as a supplement to staring, blowing, and squeezing. With the development of polyethylene powder technology in lanes, it has gradually become a widely used type of plastic molding technology.

In recent years, its development speed is relatively fast. The development of the entire paint management is relatively complete. In addition to the rotomolding machine manufacturer and the rotomolding product manufacturer, there are also a considerable number of other professional auxiliary factories, such as the rotomolding mold manufacturer, the release agent production factory. The production of pigments for rotomolding Factory, mill factory, insert factory and mixing equipment factory suitable for rotomolding, as well as many raw material supply factories for rotomolding and so on. In general, the development and research of the rotomolding process in the rotomolding market started later than those in Europe and America. In the middle and late 1990s, after some companies introduced rotomolding equipment and technology from abroad, they began to realize large-scale industrial production in the true sense of the word. According to statistics, there are thousands of rotomolding products enterprises: in terms of raw materials, PE is the main product of rotomolding products.

However, after more than 20 years of development, the rotational molding process has basically matured and is different from other processes and has prospects. At present, it can be seen that it has the ability to process large-scale hollow plastic products, the production and application of plastic products are constantly expanding, and the rolling mechanism has developed rapidly. It should be said that the rotational molding industry has formed a complete industrial model for the application of raw materials, equipment, molds and products.

The rotational molding technology has great vitality and is a process worthy of attention. The paint molding process should be given good attention, and the rotational molding process should be used to produce various plastic parts. Actively digest and absorb technology, and increase research on related processes, equipment and molds.





1. The cost of short rolling molds is low: for products of the same size, the cost of rotational molding molds is much lower than that of blow molding and injection molds. 2. The edge strength of rotational molding products is good. Solve the problem that the edge of the product in the middle chamber is thin 3. Rotomolding can place various inserts 4. The shape of the rotomolding product can be complex 5. The rotomolding can produce a fully enclosed product 7. There is no need to adjust the mold, and the wall thickness of the rotomolded product can be adjusted freely



### PRODUCT INTRODUCTION





Rotational molding is to first add plastic raw materials into the mold, and then the mold is continuously rotated along two vertical axes and heated, so that the plastic raw materials in the mold are gradually uniformly coated and melted and adhered to the mold under the action of gravity and thermal energy. The entire surface of the cavity is formed into the desired shape, then cooled to shape, demolded, and finally the product is obtained.

# **SHELL MATERIAL**

LINEAR LOW DENSITY POLYETHYLENE
(LIDPE) RESIN IS CALLED THE THIRD
GENERATION POLYETHYLENE. IN
ADDITION TO THE PROPERTIES OF
GENERAL POLYOLEFIN RESINS, ITS
TENSILE STRENGTH, TEAR STRENGTH,
ENVIRONMENTAL STRESS CRACK
RESISTANCE, LOW TEMPERATURE
RESISTANCE, HEAT RESISTANCE THE
PERFORMANCE AND PUNCTURE
RESISTANCE ARE PARTICULARLY
SUPERIOR.

### **INFILL**

THE CHARACTERISTICS OF
POLYURETHANE FOAM ITSELF:
LIGHT WEIGHT, HEAT
INSULATION, HEAT
PRESERVATION, WATERPROOF,
FIRE AND CORROSION
RESISTANCE, ABRASION
RESISTANCE, OIL RESISTANCE,
FATIGUE RESISTANCE,
VIBRATION RESISTANCE AND
STRONG ADHESION.

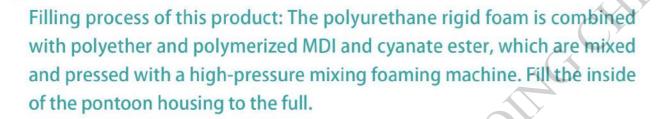




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### PRODUCT INTRODUCTION





#### Main Specifications

project	Shell performance index	project	Internal performance indicators
Tensile Strength	>12Mpa	water absorption	<2g/100c m²
Elongation at break	10.1%	Breaking strength	0.08-0.18Mpa
Impact strength	>31.4KJ/m²	Elongation at break	4-6%
Bending strength	>15.7Mpa	compressive strength	0.18-0.24Mpa
specific gravity	0.93	heat resistant temperature	-60°C+120°C











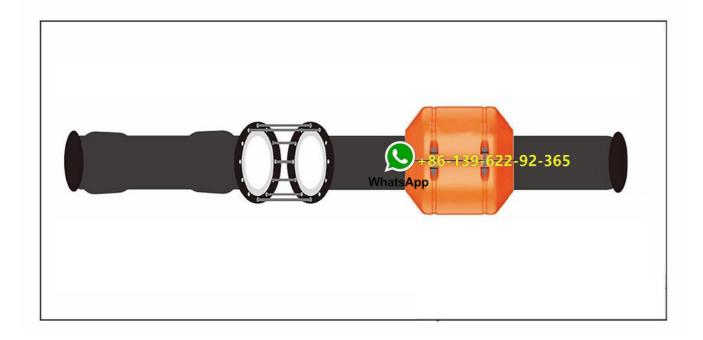




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## PRODUCT INSTALLATION











Installation instructions: Put any piece of floating body arc face down and put the HDPE pipe on the floating body. Then take any piece of floating body and buckle it on the pipe. Fix it with gaskets and bolts. Align the flange hole of the rubber hose with that of the HDPE pipe, pass the bolt through the flange hole, and tighten the nut to fix it.





bandage

parts





# **ENGINEERING CASE**











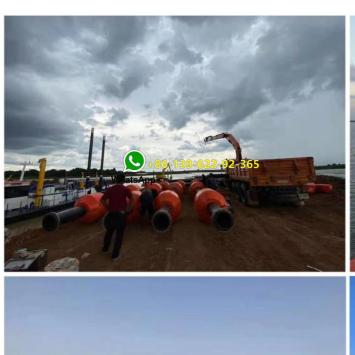






# **ENGINEERING CASE**

















Support custom-made, complete mold specifications

### DRAIN GRATING BUOY





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The pollution-retaining buoy will not pollute the water quality, and can be recycled and reused. Simple installation Flexible, fast, labor-free, shortens construction time and saves costs.



1. It has floating performance, and the installation position is not affected by the tidal range. 2. No need to check during use, no inflation, no fear of scratching, no fear of friction, seawater resistance, acid and alkali resistance. 3. Long service life, up to 10-15 years 4. Maintenance-free 5. No blasting, high safety. 6. Specifications can be customized according to customer needs, you can choose a variety of colors, the product is smooth and beautiful, and the logo is obvious



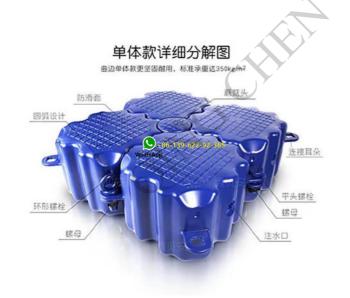
The shell is made of food-grade, long-life imported polyethylene, and the interior is filled with high-quality polyurethane foam. The buoy has strong toughness and high shell strength. Even if it is hit by strong tree debris during the flood season, it will not break! Increased blocking depth. The platoon is light in weight, so the blocking depth can be appropriately increased to 3 meters or even deeper according to specific conditions, effectively intercepting floating objects.

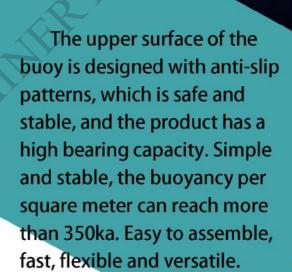


#### WATER PLATFORM

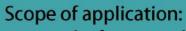


THE MATERIAL OF THIS PRODUCT IS A NEW TYPE OF **ENVIRONMENTAL PROTECTION MATERIAL PRODUCED BY** HIGH MOLECULAR WEIGHT AND HIGH DENSITY SYNTHETIC MATERIAL HMWHDPE (HIGH MOLECULAR POLYETHYLENE), WHICH ALSO ADDS ANTI-ULTRAVIOLET MATERIAL, WHICH HAS SUFFICIENT TOUGHNESS AND HARDNESS, CAN WITHSTAND CHANGES IN NATURAL ENVIRONMENT AND LOW TEMPERATURE INVASION, LIGHT WEIGHT, BUOYANCY LARGE, ACID AND ALKALI RESISTANCE, ZERO MAINTENANCE, FLEXIBLE COMBINATION, LONG LIFE, BRIGHT AND BEAUTIFUL COLOR, ANTI-CORROSION, ANTI-FREEZING, ANTI-ULTRAVIOLET AND ANTI-AGING, FREE FROM CORROSION BY SEAWATER, CHEMICALS, CHEMICALS, OIL FORMED SEAMLESSLY AT ONE TIME . NO WATER SEEPAGE AND NO WATER STORAGE PROBLEMS, AND CAN BE RECYCLED AND REUSED. THIS PRODUCT HAS BEEN WIDELY USED AT HOME AND ABROAD.









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water platform, yacht marina, water pontoon, water leisure platform, speedboat dock, floating dock, sightseeing platform, water restaurant, water park water wooden house, water stage, sea bathing pool, water swimming pool, ferry, cage aquaculture construction, buoy engineering construction and A series of water projects such as water entertainment facilities.

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### BUOYS



material, workmanship

The outer shell is made of polyethylene PE, and the inner polyurethane foam is formed by rotomolding process in one step, which is strong and durable without welding seams.

#### **Features**

Impact, corrosion, maintenance-free, service life, environmental protection, light weight, good warning effect.

#### application

The buoy acts as a sign (reference) on the vast sea (lake) surface, and is widely used in flood control, flood control, water rescue, seaside play, etc., and buoys are used as signs. They are usually anchored to prevent currents from shifting them.





#### shapes and clours

The basic shapes of the buoy body are tank, cone, spherical, cylindrical, rod and so on.

The buoy can be made of red/orange/yellow/green. The color is bright, sunscreen and anti-aging, and it will not fade during use.







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## POLYETHYLENE FLOAT

# POLYETHYLENE FLOAT



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The polyethylene warning float is made of high-quality imported PE raw materials and can be made into red, orange, yellow, blue, green, black and other colors.

It is mostly used for water surface warning interception in rivers, lakes, reservoirs, offshore waters, etc. It can also be used for cultivating floating balls through ropes and nets, and warning signs can be painted on the surface of the balls.



Polyethylene warning float is made of polyplastic floating body produced by plastic process. The sphere has excellent toughness and high impact resistance, and it is filled with foam to ensure that it can maintain certain buoyancy even if it is broken into water.





